IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: **Zhou et al.**　　　　§　Group Art Unit: **2164**
　　　　　　　　　　　　　　　　　　　§
Serial No.: **10/782,501**　　　　　　　§　Examiner: **Belix M. Ortiz**
　　　　　　　　　　　　　　　　　　　§
Filed: **February 19, 2004**　　　　　　§　Attorney Docket No.: **CA920030052US1**
　　　　　　　　　　　　　　　　　　　§
For: **File Translation**　　　　　　　　§

Commissioner for Patents
P.O. Box 1450
Alexandria VA 22313-1450

35525
PATENT TRADEMARK OFFICE
CUSTOMER NUMBER

RESPONSE TO OFFICE ACTION

Sir:

No fees are believed to be required. If, however, any fees are required, I authorize the Commissioner to charge these fees which may be required to IBM Corporation Deposit Account No. 09-0447. No extension of time is believed to be necessary. If, however, an extension of time is required, the extension is requested, and I authorize the Commissioner to charge any fees for this extension to IBM Corporation Deposit Account No. 09-0447.

In response to the Office Action of August 10, 2006, please amend the above-identified application as follows:

Amendments to the Claims are reflected in the listing of claims which begins on page 2 of this paper.

Remarks/Arguments begin on page 6 of this paper.

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1.   (Currently Amended)   A method of translating translatable components in a structured file, comprising the steps of:

(i)   parsing said structured file to identify said translatable components and a source language, wherein said structured file includes an identifier prior to said parsing, and wherein said identifier identifies each of said translatable components;

(ii)   effecting translation of said identified translatable components from said source language to a selected destination language so as to generate corresponding translated components; and

(iii)   generating a new translated file having substantially the same structure as said structured file and having said translated components in place of said translatable components.

2.   (Canceled)

3.   (Currently Amended)   The method of claim [[2]] 1, wherein said identifier is a prefix, and wherein said prefix is a character string.

4.   (Currently Amended)   The method of claim 3, wherein (i) further comprises identification of said prefix using a parser.

5.   (Original)   The method of claim 1, further comprising extracting said identified translatable components into an isolated file for effecting translation in (ii) of said translatable components to said translated components.

6.   (Original)   The method of claim 5, wherein said structured file, after extraction of said identified translatable components, comprises a skeleton file.

7.   (Currently Amended)   The method of claim 6, wherein (iii) further comprises merging said skeleton file and said translated components in said isolated file.

8.   (Original) The method of claim 7, wherein said structured file is an XML file, and said translatable components comprise translatable element and attribute values.

9.   (Currently Amended)   The method of claim 1, wherein (i) further comprises utilizing a structure definition file corresponding to said structured file to identify said translatable components, said structure definition file containing identification information for said translatable components in said structured file.

10.   (Currently Amended)   The method of claim 9, wherein (ii) further comprises translating said translatable components in situ and (iii) further comprises replacing said translatable components with said corresponding translated components.

11.   (Original) The method of claim 10, wherein said structured file is an XML file and said structure definition file is an XML schema definition file identifying translatable elements and attributes in said XML file.

12.   (Currently Amended)   A system for translating translatable components in a structured file, comprising :

        (a)   a parser for parsing said structured file to identify said translatable components and a source language, wherein said structured file includes an identifier prior to said parsing, and wherein said identifier identifies each of said translatable components;

        (b)   an interface to a translator for translation of said identified translatable components from said source language to a selected destination language to generate corresponding translated components; and

        (c)   an output module for generating a new translated file having substantially the same structure as said structured file and having said translated components in place of said translatable components.

13.   (Currently Amended)   The system of claim 12, wherein said identifier is a prefix, and wherein said prefix is a character string.

14.   (Original) The system of claim 13, wherein said structured file is an XML file, and said parser comprises a SAX parser for searching for said identifiers which identify each translatable component.

15.　　(Original)　The system of claim 12, further comprising an extraction module for extracting said identified translatable components into an isolated file for interfacing with said translation unit.

16.　　(Original)　The system of claim 15, wherein said structured file, after extraction of said identified translatable components, comprises a skeleton file.

17.　　(Original)　The system of claim 16, wherein said output module merges said skeleton file and said translated components in said isolated file.

18.　　(Original)　The system of claim 12, wherein said parser is configured to parse a structure definition file corresponding to said structured file, said structure definition file containing identification information for said translatable components in said structured file.

19.　　(Original)　The system of claim 18, wherein said structured file is an XML file, said structure definition file is an XML schema definition file, and said parser comprises a DOM parser.

20.　　(Original)　The system of claim 19, wherein said translation module is configured to use said XML schema definition file and said DOM parser to identify said translatable components in said XML file, and to translate said translatable components in situ.

21.　　(Currently Amended)　A computer readable medium for translating translatable components in a structured file, the computer readable medium comprising:

　　　　(i)　　code for parsing said structured file to identify said translatable components and a source language, wherein said structured file includes an identifier prior to said parsing, and wherein said identifier identifies each of said translatable components;

　　　　(ii)　　code for effecting translation of said identified translatable components from said source language to a selected destination language so as to generate corresponding translated components; and

　　　　(iii)　　code for generating a new translated file having substantially the same structure as said structured file and having said translated components in place of said translatable components.

22.　　(Currently Amended)　A system for translating components in a structured file, comprising:

　　　　(a)　　means for parsing said structured file to identify said translatable components and a source language, wherein said structured file includes an identifier prior to said parsing, and wherein said identifier identifies each of said translatable components;

(b)   means for interfacing to a translator for translation of said identified translatable components from said source language to a selected destination language to generate corresponding translated components; and

(c)   means for generating a new translated file having substantially the same structure as said structured file and having said translated components in place of said translatable components.

23.   (New) The method of claim 1, wherein a serial number is associated with each of said translatable components, and wherein said serial number is used as a placeholder to place each of said translated components in a proper location within said new translated file.

REMARKS/ARGUMENTS

Claims 1 and 3-23 are pending in the present application. Claim 2 is canceled. Claims 1, 3, 4, 7, 9, 10, 12, 13, 21, and 22 are amended. Claim 23 is added. No new matter is added by any of the amendments to the claims. Reconsideration of the claims is respectfully requested.

I.   **Telephonic Interview with Examiner Ortiz on November 1, 2006**

Applicants thank Examiner Belix Ortiz for the courtesy extended to Applicants' representative during the November 1, 2006 telephonic interview. During the teleconference, the Examiner and Applicants' representative discussed proposed amendments to the independent claims to further distinguish the present invention from the cited prior art references. No agreement was reached during the interview. However, the Examiner recommended amending dependent claims 4, 7, 9, and 10 to recite further comprises, as opposed to comprises. Consequently, this Response amends dependent claims 4, 7, 9, and 10 according to the Examiner's recommendation. The substance of the interview, as well as additional reasons that the claims are not unpatentable, is summarized in the remarks of Section II, which follows below.

II.   **35 U.S.C. § 103, Asserted Obviousness, Claims 1-22**

The Examiner rejects claims 1-22 under 35 U.S.C. §103 as being unpatentable over Macklin, U.S. Patent Publication No. 2003/0014237 A1 ("Macklin") in view of Travieso et al., U.S. Patent Publication No. 2004/0168132 A1 ("Travieso"). This rejection is respectfully traversed. Dependent claim 2 of the present invention is canceled by this Response to Office Action. As a result, rejection of claim 2 under 35 U.S.C. §103 is now moot. However, the features of canceled claim 2 are incorporated into the independent claims of the present invention by way of amendment.

The Examiner bears the burden of establishing a *prima facie* case of obviousness based on the prior art when rejecting claims under 35 U.S.C. §103. *In re Fritch*, 972 F.2d 1260, 23 U.S.P.Q.2d 1780 (Fed. Cir. 1992). For an invention to be *prima facie* obvious, the prior art must teach or suggest all claim limitations. *In re Royka*, 490 F.2d 981, 180 U.S.P.Q. 580 (C.C.P.A. 1974). In this case, the Examiner has not met this burden because all of the recited features of these claims are not found in the cited prior art references as believed by the Examiner. Therefore, the combination of Macklin and Travieso will not reach the presently claimed invention recited in these claims.

Amended independent claim 1 of the present invention, which is representative of amended independent claims 12, 21, and 22 with regard to similarly recited subject matter, reads as follows:

1.   A method of translating translatable components in a structured file, comprising the steps of:

(i)   parsing said structured file to identify said translatable components and a source language, wherein said structured file includes an identifier prior to said parsing, and wherein said identifier identifies each of said translatable components;

(ii)   effecting translation of said identified translatable components from said source language to a selected destination language so as to generate corresponding translated components; and

(iii)   generating a new translated file having substantially the same structure as said structured file and having said translated components in place of said translatable components.

With regard to claim 1, the Examiner states:

> As to claims 1, 12, and 21-22, Macklin teaches a method, a system, and a computer readable medium of translating translatable components in a structured file (see abstract), comprising:
>
>   (ii) effecting translation of said identified translatable components from said source language to a selected destination language so as to generate corresponding translated components (see abstract and paragraphs 5, 7, and 17); and
>
>   (iii) generating a new translated file having substantially the same structure as said structured file and having said translated components in place of said translatable components (see paragraphs 5 1 and 53 -54).
>
>   Macklin does not teach (i) parsing said structured file to identify said translatable components and a source language.
>
>   Travieso et al. teaches analyzing web site for translation (see abstract), in which he teaches (i) parsing said structured file to identify said translatable components and a source language (see abstract and paragraphs 11 and 46).
>
>   It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Macklin by the teaching of Travieso et al., because (i) parsing said structured file to identify said translatable components and a source language, would enable the method because, "The translation server 400 parses each incoming HTML page into translatable components, substitutes each incoming translatable component with an appropriate translated component, and returns the translated web page back to the online user 416. Page conversion is performed on the fly each time an online user 416 requests a page in the second or alternate language. When a web page is received for conversion, the translation server 400 will translate the page if enough translated content is available to meet a customer specified translation threshold. If this is not the case, then the page will be returned in the first or original language", (see paragraph 46).

Office Action dated August 10, 2006, pages 2 and 3.

Macklin teaches a method for "converting text from a Standard Generalized Markup Language ('SGML') file having a plurality of characters to another specified language." Macklin, page 1, paragraph 0001. However, Applicants agree with the Examiner that "Macklin does not teach (i) parsing said structured file to identify said translatable components and a source language." Office Action dated August 10, 2006, page 2, last sentence. Consequently, Macklin does not teach or suggest "parsing said

structured file to identify said translatable components and a source language, wherein said structured file includes an identifier prior to said parsing, and wherein said identifier identifies each of said translatable components" as recited in amended claim 1.

Travieso teaches a method for synchronizing web content by dynamically translating web site content to another language. Travieso, Abstract and page 1, paragraph 0002. The method as taught by Travieso "includes **dividing** the first web content into a plurality of translatable components and **generating** a unique identifier for each of the plurality of translatable components." [Emphasis added]. Travieso, Abstract. Further, "each of the plurality of translatable components" is matched "to a plurality of translated components of the second web content using the unique identifier of each of the plurality of translatable components." Travieso, Abstract.

In other words, Travieso teaches that initially the first Web content is divided, or parsed, into translatable components. Then, a unique identifier is generated for each of the plurality of translatable components discovered in the first Web content. Subsequently, a translation server "identifies a plurality of **translated components** of the **second web content** using the unique identifier of each of the plurality of **translatable components** of the **first web content**." [Emphasis added]. Travieso, page 4, paragraph 0054. Thus, Travieso teaches that the unique identifier is **generated** for each of the plurality of translatable components **after** the first Web content is **parsed** and that the unique identifier is used to identify **translated components** of the second Web content and not **translatable components** of the first Web content.

In contrast, as amended, claim 1 recites parsing the structured file to identify the translatable components, wherein the structured file includes an identifier prior to parsing, and wherein the identifier identifies each of the translatable components. Support for these amended features may be found in the specification on page 2, lines 1-3, page 5, line 23 – page 6, line 18, and Figure 2A. In other words, claim 1 recites that the structured file includes the identifier to identify the translatable components prior to parsing. As shown above, Travieso instead teaches that the unique identifier is generated after parsing the first Web content. In addition, Travieso teaches that the unique identifier identifies **translated components** in the **second Web content**, whereas claim 1 recites that the identifier identifies **translatable components** in the **structured file**. The structured file recited in claim 1 is analogous to the first Web content as taught by Travieso and not the second Web content. The second Web content as taught by Travieso is analogous to the "selected destination language" recited in claim 1. Thus, Travieso does not teach or suggest the above-recited claim 1 features.

Because neither Macklin nor Travieso teach or suggest "parsing said structured file to identify said translatable components and a source language, wherein said structured file includes an identifier prior to said parsing, and wherein said identifier identifies each of said translatable components" as

recited in amended claim 1, the combination of Macklin and Travieso cannot teach or suggest these recited features. As a result, the combination of Macklin and Travieso does not teach or suggest all features recited in amended claim 1 of the present invention. Accordingly, the rejection of amended claim 1 as being unpatentable over Macklin in view of Travieso has been overcome.

In view of the arguments above, amended independent claims 1, 12, 21, and 22 are in condition for allowance. Claims 3-11 and 13-20 are dependent claims depending on independent claims 1 and 12, respectively. Consequently, claims 3-11 and 13-20 also are allowable, at least by virtue of their dependence on allowable claims. Furthermore, these dependent claims also contain additional features not taught by Macklin and Travieso.

For example, amended dependent claim 3 of the present invention, which is representative of amended dependent claims 13, reads as follows:

> 3.   The method of claim 1, wherein said identifier is a prefix, and wherein said prefix is a character string.

With regard to claim 3, the Examiner states:

> As to claims 3 and 13, <u>Macklin</u> as modified teaches wherein said identifier is a prefix (see <u>Travieso et al.</u>, paragraphs 94 and 125).

Office Action dated August 10, 2006, page 3.

As shown above, Macklin and Travieso do not teach or suggest that the identifier identifies each of the translatable components as recited in amended independent claim 1. Because Macklin and Travieso do not teach or suggest that the identifier identifies each of the translatable components as recited in amended independent claim 1, Macklin and Travieso cannot teach that the identifier that identifies each of the translatable components is a prefix as recited in amended dependent claim 3.

The Examiner cites Travieso, page 7, paragraph 0094, as teaching "wherein said identifier is a prefix." Office Action dated August 10, 2006, page 3. This Examiner-cited passage teaches that:

> To rewrite a link, the translation server **400** prefixes the original URL with the URL of the translation server **400**, so the original URL becomes the query string to the translation server **400** URL. When a rewritten link is clicked, the request goes to the translation server **400**, which reads the query string to obtain the original URL to be translated and requests the page to be translated from this URL. The translation server **400** then converts the page received to the alternate language and delivers the translated page to the consumer directly.

In other words, Travieso teaches that a uniform resource locator (URL) is rewritten by prefixing the URL of the translation server onto the URL of the original Webpage so that the Webpage may be translated to another language by the translation server prior to delivery of the Webpage to the consumer.

This process as taught by the Travieso reference is known as "Implicit Navigation." Travieso, page 7, paragraph 0092. Travieso teaches that:

> Implicit navigation is a translation server **400** feature that keeps an online user **416** in the alternate language as he/she browses a web site. Implicit navigation is implemented by **rewriting the URLs** in the applicable links inside a page **as the page is being translated**, so they are **redirected** to the translation server **400**. As a result, **not only is the page translated**, but also **all applicable links** to other translated pages **within the page** are **modified** so that when the consumer clicks on the linked page it will also be automatically translated. [Emphasis added].

Travieso, page 7, paragraph 0093.

As the passage from Travieso clearly indicates above, URLs within the original Webpage are not translated but merely rewritten or modified to redirect the link to the translation server for translation of the Web content prior to sending the Web content to the online user. Consequently, even though Travieso teaches prefixing a URL with another URL to redirect links to the translation server for automatic translation of Web content, Travieso does not teach or suggest that the URL prefix is used to identify translatable components within the Web content. Hence, Travieso does not teach or suggest that the identifier that identifies each of the translatable components is a prefix as recited in dependent claim 3. Furthermore, since Travieso does not teach or suggest that the identifier of the translatable components is a prefix, then Travieso cannot teach that the prefix is a character string as further recited in claim 3. Support for this amended feature may be found in the specification on page 2, lines 1-3 and page 6, lines 1-3. Therefore, Macklin and Travieso do not teach or suggest these recited claim 3 features.

As a further example, amended dependent claim 9 of the present invention, which is representative of dependent claim 18 with regard to similarly recited subject matter, reads as follows:

> 9.   The method of claim 1, wherein (i) further comprises utilizing a structure definition file corresponding to said structured file to identify said translatable components, said structure definition file containing identification information for said translatable components in said structured file.

With regard to claim 9, the Examiner states:

> As to claims 9 and 18, Macklin as modified teaches wherein (i) comprises utilizing a structure definition file corresponding to said structured file to identify said translatable components, said structure definition file containing identification information for said translatable components in said structured file (see Travieso et al., abstract and paragraph 11).

Office Action dated August 10, 2006, pages 4 and 5.

The Examiner cites Travieso, paragraph 0011, as teaching "...utilizing a structure definition file corresponding to said structured file to identify said translatable components, said structure definition file containing identification information for said translatable components in said structured file." Office Action dated August 10, 2006, pages 4 and 5. This Examiner-cited passage reads as follows:

> Briefly, in accordance with the present invention, disclosed is a system, method and computer readable medium for synchronizing web content. In an embodiment of the present invention, the method on an information processing system includes retrieving a first web content in a first language from a web site, the first web content corresponding to a second web content wherein the second web content is a translation in a second language of the first web content. The method further includes dividing the first web content into a plurality of translatable components and generating a unique identifier for each of the plurality of translatable components of the first web content. The method further includes matching each of the plurality of translatable components of the first web content to a plurality of translated components of the second web content using the unique identifier of each of the plurality of translatable components of the first web content. If a translatable component of the first web content is not matched to a translated component of the second web content, the method further includes designating the translatable component of the first web content for translation into the second language.

Travieso, pages 1 and 2, paragraph 0011.

Neither the immediately preceding passage above, nor anywhere else in Travieso, teach or suggest "utilizing a structure definition file corresponding to said structured file to identify said translatable components, said structure definition file containing identification information for said translatable components in said structured file" as recited in dependent claim 9. The Travieso reference makes no reference to using a "structure definition file" or an equivalent file, which corresponds to the first Web content, to identify translatable components within the first Web content. Moreover, as shown above, Travieso teaches that the unique identifier identifies **translated components** in the second Web content, whereas amended claim 1 recites that the identifier identifies each of the **translatable components** in the structured file. As a result, Travieso does not teach or suggest the features recited in claim 9.

Furthermore, dependent claim 11 of the present invention reads as follows:

> 11.   The method of claim 10, wherein said structured file is an XML file and said structure definition file is an XML schema definition file identifying translatable elements and attributes in said XML file.

With regard to claim 11, the Examiner states:

> As to claim 11, Macklin as modified teaches wherein said structured file is an XML file and said structure definition file is an XML schema definition file identifying translatable elements and attributes in said XML file (see Macklin, figure 1).

Office Action dated August 10, 2006, page 5.

As shown above, Travieso does not teach or suggest utilizing a structure definition file to identify translatable components within the structured file as recited in dependent claim 9. Because Travieso does not teach or suggest utilizing a structure definition file to identify translatable components within the structured file as recited in dependent claim 9, Travieso cannot teach or suggest that "said structure definition file is an XML schema definition file" as recited in dependent claim 11. Therefore, Travieso does not teach or suggest this recited claim 11 feature.

The Examiner cites Macklin, figure 1, as teaching "said structured file is an XML file and said structure definition file is an XML schema definition file identifying translatable elements and attributes in said XML file." Office Action dated August 10, 2006, page 5. Macklin, figure 1, shown below, only teaches HTML files and translated HTML files.
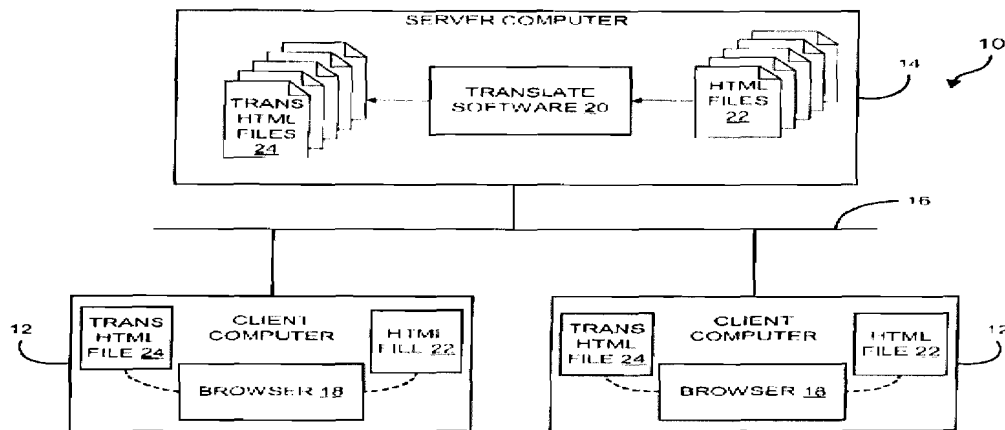

FIG. 1

Macklin, figure 1.

The associated text for figure 1 of Macklin teaches: "It should be noted that although a HTML file is described as an example, any type of SGML files, such as XML, can be used with the present invention." Macklin, page 3, paragraph 0041. Even though Macklin teaches an XML file, Macklin makes no reference to utilizing "an XML schema definition file" to identify translatable elements and attributes in the XML file as recited in claim 11. Consequently, Macklin does not teach or suggest this recited claim 11 feature.

Accordingly, the rejection of claims 1 and 3-22 under 35 U.S.C. §103 has been overcome.

III.   Added Claim 23

This Response to Office Action adds dependent claim 23. Support for the features recited in added claim 23 may be found in the specification on page 6, line 28 – page 7, line 2 and page 7, lines 26-28. Added claim 23 also is allowable at least by virtue of its dependence upon allowable independent claim 1. Furthermore, this dependent claim also contains additional features not taught or suggested by the cited prior art references used to reject the claims above.

For example, added dependent claim 23 of the present invention reads as follows:

23.   The method of claim 1, wherein a serial number is associated with each of said translatable components, and wherein said serial number is used as a placeholder to place each of said translated components in a proper location within said new translated file.

Applicants agree with the Examiner that "Macklin does not teach (i) parsing said structured file to identify said translatable components and a source language." Office Action dated August 10, 2006, page 2, last sentence. In addition, even though Travieso teaches that the translated components of the second Web content are matched to the translatable components of the first Web content using the generated unique identifier (Travieso, abstract), Travieso makes no reference to using the generated unique identifier as a "placeholder to place each of said translated components in a proper location within said new translated file" as recited in added claim 23. Thus, Macklin and Travieso do not teach or suggest that "a serial number is associated with each of said translatable components, and wherein said serial number is used as a placeholder to place each of said translated components in a proper location within said new translated file" as recited in added dependent claim 23.

Accordingly, Macklin and Travieso, neither individually, nor in combination, teach nor suggest the features recited in added dependent claim 23.

IV. Conclusion

It is respectfully urged that the subject application is patentable over the cited prior art references and is now in condition for allowance.

The Examiner is invited to call the undersigned at the below-listed telephone number if in the opinion of the Examiner such a telephone conference would expedite or aid the prosecution and examination of this application.

DATE: November 10, 2006

Respectfully submitted,

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